# REACTING TO PROJECT TERMINATION THE UNPLANNED CYCLE STEP

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## Presentation Roadmap

**Project Termination** 

Background

**Factors for Termination** 

**Methods of Termination** 

**Examples** 

**Impact** 

**Minimizing the Trauma** 

**Still Requires Closure** 



# **Presentation Purpose**

- Explore project termination process
  - Factors that often cause a project termination.
  - Impact of project termination on individuals and the organization.
  - Suggested management techniques to best deal with such occurrences.

**Presenter's Note:** For the purpose of this presentation, the presenter refers to termination as the cancellation of a project before it has reached its expected goals.



Project termination is often the right decision as it demonstrates the organization's willingness to challenge itself...



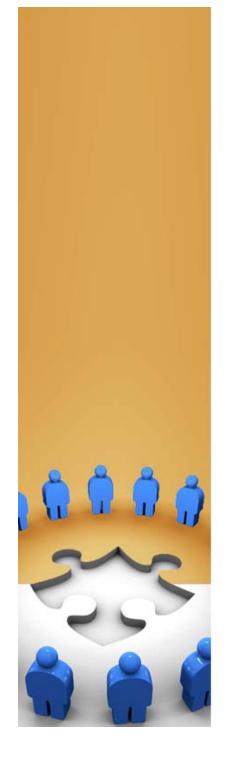
#### **Observations**

- Limited information exists on the impact of project termination on individuals and the organization.
  - Few references in PMBOK.
  - Kerzner devotes less than 5 pages in his industryleading project management "bible".
  - Mantel and Meredith devote less than 5 pages in their widely used *Project Management in Practice* teaching text.
  - People hesitate to share project termination experiences.



# My Experience

- Next Generation Launch Technology (NGLT) HyTEx Project Team Member
  - High hopes extinguished.
  - NASA terminated my first project.
  - Quote from an APPEL classmate when sharing this experience.
    - "Forget about it Rob. I have either been a Project Manager or team member on 9 projects and they have all been cancelled."

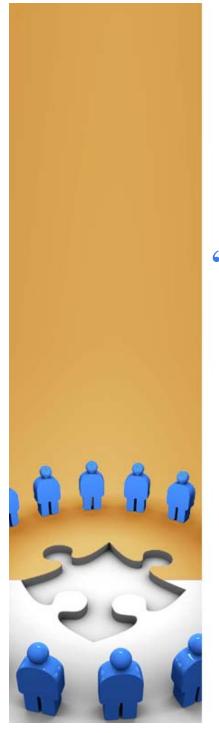


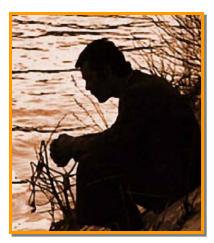
## Termination —Often Externally Initiated



"NASA Presidential Transition Team Requests for Information," asks agency officials to provide the latest information on Ares 1, Orion and the planned Ares 5 heavy-lift cargo launcher, and to calculate the near-term close-out costs and longerterm savings associated with canceling those programs."

(Reference: Berger, 2008)





"Termination of a project, particularly a long and difficult one is akin to the breakup of a family and may well be stressful, even to the point of grieving."

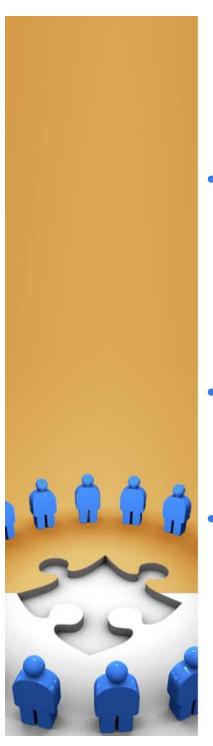
(Reference: Mantel, Meredith, Shafer, Sutton, 2005)





"Projects sometimes end, not in a victory parade but in stunned silence, with project teams trying to absorb crushing news."

(Reference: Baker, 2002)



# Project Definitions Miss the Mark by Avoiding Termination

- NASA defines a project as, "A specific investment identified in a Program Plan having defined requirements, a life-cycle cost, a beginning, and an end. A project also has a management structure and may have interfaces to other projects, agencies, and international partners. A project yields new or revised products that directly address NASA's strategic needs." (NPR 7120.5D, 2007)
- Mantel and Meredith defines a project as, "A project, then, is a temporary endeavor undertaken to create a unique product or service. It is specific, timely, usually multidisplinary, and always conflict ridden." (Mantel and Meredith, 2005)
- Kerzner defines a project as, "Any series of activities and tasks that have a specific objective to be completed within certain specifications, have defined start and end dates, have funding limits, consume human and nonhuman resources, and are multifunctional." (*Kerzner*, 2006)



# PMI Hits the Mark....Finally

- The Project Management Institute (PMI) defines a project as, "A temporary endeavor undertaken to create a unique product or service." (PMI, 1996, 2000, 2004)
- The PMI defines a project as, "A project is a temporary endeavor undertaken to create a unique product, service or result. The temporary nature of projects indicates a definite beginning and end. The end is reached when the project's objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists." (PMI, 2008)

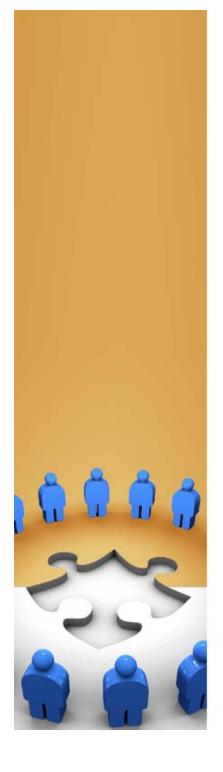


# Factors for Terminating Projects

• Likelihood it will be a technical or commercial failure.

- Too costly to develop.
- Change in needs.
- Allocated time is exceeded.
- Higher priority of other projects requiring funds or manpower.
- Technical problems cannot be solved with available employee skill set.
- Personal whims of management.

(Reference: Mantel, Meredith, Shafer, Sutton, 2005, and Kerzner, 2006)



### Factors for Terminating Projects (Cont.)

- NASA (NPR 7120.5D, 2007)
  - Anticipated inability of the program or project to meet its commitments.
    - NASA Administrator Dan Goldin in a 1994 speech, "If projects run over budget they will be canceled. I am looking forward to the first opportunity to cancel a project for this reason!" (Grahn, 2008)
    - NASA Associate Administrator Ed Weiler in a 2008 interview, "I have a clear record as the associate administrator for six years. I canceled five programs. I'm capable of doing that again." (Berger, 2008)
  - Unanticipated change in Agency strategic goals.
  - Unanticipated change in the NASA budget.



## Methods of Project Termination

- Termination-by-Extinction
  - Project stops (completed or terminated).
    - The "Hatchet" (removal of resources).
- Termination-by-Addition
  - Project successfully completed and institutionalized (e.g., new division).
- Termination-by-Integration
  - Project becomes standardized (e.g., software becomes standard or new machine part of the production line).
- Termination-by-Starvation
  - Politically incorrect to terminate a project but its budget can be squeezed until it is a project in name only.
- Termination-by-Murder
  - Forced retirement of the project champion.
  - Merger of the firm conducting the project with another firm.

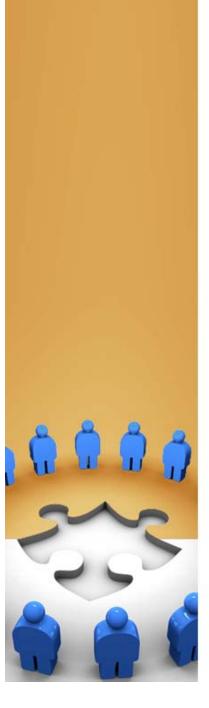
(Reference: Mantel, Meredith, Shafer, Sutton, 2005, and Kerzner, 2006)



### Examples of Terminated Projects/Programs

Project/Program	Year	Press Sited Reasons	eROLLO FAIR
Apollo 18	1970	Budgetary Constraints	OCHO OF BRANDS
Project/Program	Year	Press Sited Reasons	MPONLO 769
Apollo 19	1970	Budgetary Constraints	POGUE
Project/Program	Year	Press Sited Reasons	APOLIO
Apollo 20	1970	Budgetary Constraints	LIND
Project/Program	Year	Press Sited Reasons	Carrie State Control
Voyager Mars	1970	Budgetary Constraints	CHARLES (SCHOOL)
Project/Program	Year	Press Sited Reasons	2/-
*Gravity Probe B * Cancellation reversed	1989, 1993,19	Funding Priorities	

<sup>•</sup>Note: NASA's History Office maintains an extensive collection of historical documents but they are not aware of an official list of terminated NASA projects.



#### Examples of Terminated Projects/Programs (Cont.)

Project/Program	Year	Press Sited Reasons	United States
Advanced Solid Rocket Motor	1993	Budgetary Constraints	Unite
Project/Program	Year	Press Sited Reasons	a
X-33	2001	Cost and Technical	
Project/Program	Year	Press Sited Reasons	
X-34	2001	Cost and Technical	2000000000000
Project/Program	Year	Press Sited Reasons	
X-38	2002	Budgetary Constraints	
Project/Program	Year	Press Sited Reasons	
Checkout Launch & Control System	2002	Cost and Schedule	

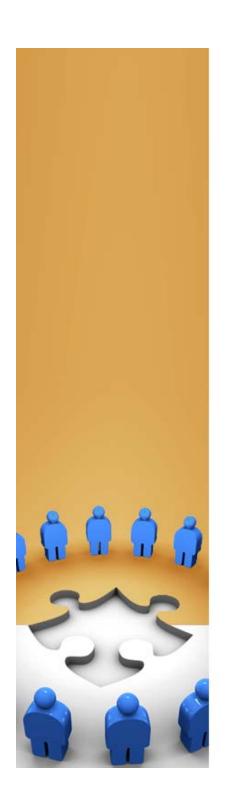
<sup>•</sup>Note: NASA's History Office maintains an extensive collection of historical documents but they are not aware of an official list of terminated NASA projects.



#### Examples of Terminated Projects/Programs (Cont.)

Project/Program	Year	Press Sited Reasons	
X-43C	2004	Change in Needs	
Project/Program	Year	Press Sited Reasons	
RS-84	2004	Change in Needs	
Project/Program	Year	Press Sited Reasons	
HyTEx	2004	Change in Needs	The second
Project/Program	Year	Press Sited Reasons	A
*Dawn * Cancellation reversed	2006	Cost and Technical	
Project/Program	Year	Press Sited Reasons	
DSCOVR	2006	Competing Priorities	

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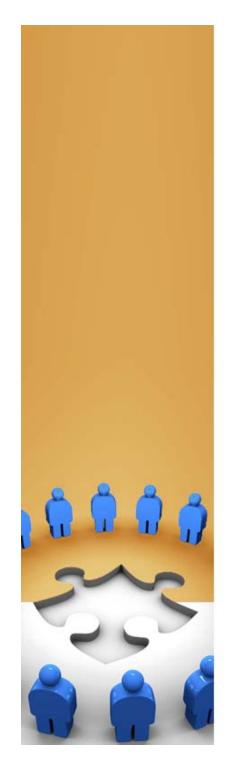


What projects or programs have you worked on that have been terminated?



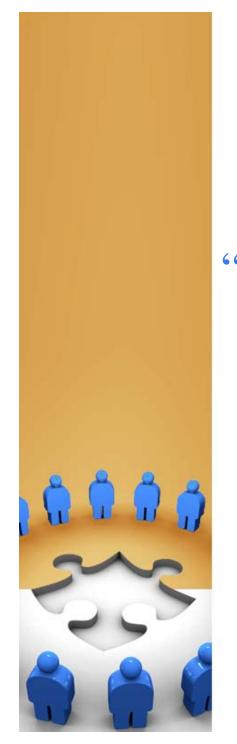
# Negative Impact of Termination

- PM and team members can experience Anaclitic Depression.
  - Term used to describe a particular, circumscribed form of melancholy that we often experience when the individuals, organizations, or belief systems that we lean on or are dependent on for emotional support are withdrawn from us. (Harvey, 1999)
- Anaclitic Depression Phases
  - Phase I: Anger directed toward the organization.
  - Phase II: Reversed and focused inward, creating depression.
  - Phase III: Sink into apathy.
  - Phase IV: Detachment. (Harvey, 1999)
- Many PM's and team members suffer from feelings of separation and abandonment.
- Removed PM's or team members inevitably serve as a visible reminder of what could happen to those who remain. (*Harvey*, 1999)



"Meir Statman and David Caldwell reported that whereas companies acknowledge that project termination causes employee pain, they ignore the pain of employees such as project managers who are retained while their projects are terminated."

(Reference: Statman and Caldwell, 1987)

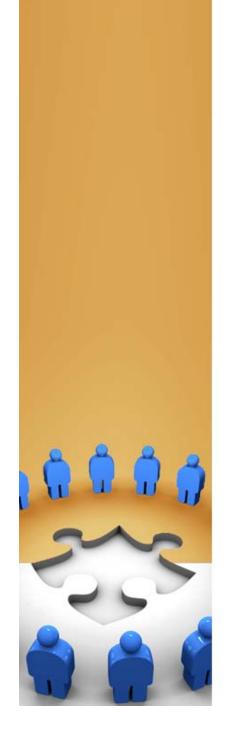




John Muratore

"You're considered radioactive when you're leading a Project or Program that is terminated. Colleagues think they will get infected and don't want to be near you," said John Muratore X-38 Program Manager.

(Reference: Muratore, 2009)





Gene Austin

"I literally did not feel like going to work for 3 weeks and I did not after receiving word that the Solar Electric Propulsion Stage (SEPS) project had been cancelled in 1976," said Gene Austin, SEP team member and future X-33 Program Manager.

(Reference: Austin, 2009)

\*SEPS was reactivated in 1978





**Dawn Team Members** 

"There are hundreds of people in this country and Europe who have worked on the Dawn Project for four years and had committed another decade to it and now it is dropped. What can I say, it makes me cry," said Lucy McFadden, Dawn team member.

(Reference: David, 2006)



## Negative Impact of Termination (cont.)

- Employee Productivity
  - Michael Boomer and Victor Pease researched the impact of project termination on productivity and found there is a significant loss of human productivity for months beyond termination. (Boomer and Pease, 1991)
  - Steve Cook, current manager of the Ares Projects Office, and former Acting Program Manager for Next Generation Launch Technology (NGLT) agrees with Boomer and Victor's findings and feels 4 to 6 months of employee productivity was lost after projects under the NGLT program were terminated. (Cook, 2009)
  - Non-productive time is a high financial impact to the entire organization.



## Negative Impact of Termination (cont.)

- Employee Commitment
  - Jerry B. Harvey, Professor Emeritus of Management at The George Washington University, found an unhealed employee may never work with the same sense of enthusiasm, loyalty, and commitment. (*Harvey*, 1999)
  - When terminations are perceived as a negative experience than employee commitment may never return to pretermination levels. (Boomer and Pease, 1991)
  - A Stennis employee states every time they work on a project, one of their team members will remind them not get too connected and reminds them of what happened on the Advanced Solid Rocket Motor project.
  - Steve Cook felt it took 2 years for team members to buy into the Ares Program after being taken to the edge of the abyss after projects under the NGLT program were terminated. (Cook, 2009)



## Negative Impact of Termination (cont.)

- Reputation of the Agency
  - NASA suffers from a 'stop-start' approach to its human spaceflight programs. (Multiple sites, 2009)
  - NASA's history in the last few decades has been littered with projects that have failed or were terminated. (*Hedman*, 2005)
  - Terminated projects create a sense of wastefulness of taxpayer dollars.
  - Capability and leadership are also questioned when programs are terminated.



# Keys to Minimizing the Trauma

- Include team in the termination decision process.
  - Made aware of the rationale behind the termination well before the official announcement.
  - Invited to participate in review process as defined in NPR 7120.5D.
- Encourage team that project termination does not always indicate project mismanagement.
  - "These science missions are not the one millionth copy of a Toyota," said Dr. Ed Weiler. (Berger, 2008)
- Offer Employee Assistance Program services.
- Present team members plans for future assignments.
- Quickly reassign to a project that is perceived as comparable.
- Offer beneficial training opportunities.



# Keys to Minimizing the Trauma (Cont.)

- Allow team to document accomplishments and status.
  - Provides closure.
  - The scores of terminated projects in NASA's history probably have a wealth of information **lost** that could help future projects. (*Hedman*, 2005)
- Acknowledge team and individual efforts.
  - Boomer and Pease research found the accomplishments of terminated projects were generally not recognized.
- Assure PM's and team members that project termination does not threaten their career.
- Identify how the work completed will contribute to future projects.
- Hold a celebration of the team's achievements.

What are your experiences?



# Termination Still Requires Closure

- Termination phase should be executed as a project in itself.
- Secure top-management involvement and support.
- Appoint a Termination Manager.
  - Project Manager supports the Termination Manager.
- Plan termination phase.
  - Clearly defined tasks.
  - Agreed on responsibilities.
  - Schedules.
  - Budgets.
  - Deliverable items.
- Satisfy contractual requirements.
- Release resources (team members and materials).
- Determine what records to keep and store them in the organizations archives.
- Clear the project with legal counsel.
- Deliver a Project Final Report detailing the project history and the lessons learned.



Project termination is often the right decision as it demonstrates the organization's willingness to challenge itself, but how it is managed can minimize the inherent negative effects on employees and the organization.

**Presenter's Note:** The present study is preliminary and exploratory. It reveals that further research is necessary.



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